

## DETAILED ACTION

### ***Election/Restrictions***

1. Claims 37-68 are allowable. The restriction requirement between Group I and Group II, as set forth in the Office action mailed on 01/07/2009, has been reconsidered in view of the allowability of claims to the elected invention pursuant to MPEP § 821.04(a). **The restriction requirement is hereby withdrawn as to any claim that requires all the limitations of an allowable claim.** Claims 38-54 and 67, 68, directed to n-type group III nitride semiconductor layered structure and process for producing a n-type group III nitride semiconductor layered structure respectively no longer withdrawn from consideration because the claim(s) requires all the limitations of an allowable claim.

In view of the above noted withdrawal of the restriction requirement, applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

Once a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

### **EXAMINER'S AMENDMENT**

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as per telephone authorization from applicant's attorney Hui C. Wauters on 6/18/2010 as follows:

- In lines 6 and 8 of claim 37, two of "said" in each line have been replaced with --the--.
- In lines 6, 7, 9, 12, 13 of claim 55, all of "said" in each line have been replaced with --the--.

### ***Allowable Subject Matter***

3. Claims 37-68 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

With regard to claim 37 and 55, the prior art of record fails to teach or suggest a n-type group III nitride semiconductor layered structure or a process for producing a n-type Group III nitride semiconductor layered structure particularly with the lower concentration layer being stacked on the higher concentration layer, wherein the higher concentration layer and the lower concentration layer are provided in an alternate and periodic manner, the repetition number of the higher concentration layer and the lower concentration layer is 10 to 1000 and a thickness of a repetition cycle is 1 nm to 1000 nm as set forth in the combination with other elements of claims 37 and 55.

The corresponding dependent claims are allowable at least for the same reason.

Any comments considered necessary by applicant must be submitted no later than the payment of issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:
  - JP 2003-017420: The invention teaches related group III nitride semiconductor layered structure yet fail to teach or suggest the lower concentration layer being stacked on the higher concentration layer, wherein the higher concentration layer and the lower concentration layer are provided in an alternate and periodic manner, the repetition number of the higher concentration layer and the lower concentration layer is 10 to 1000 and a thickness of a repetition cycle is 1 nm to 1000 nm as in the claimed device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SELIM AHMED whose telephone number is (571)270-5025. The examiner can normally be reached on 9:00 AM-6:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sue Purvis can be reached on (571)272-1236. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SA/

/Evan Pert/  
Primary Examiner, Art Unit 2826